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### **BUREAU OF WASTE PREVENTION DIVISION OF AIR AND CLIMATE PROGRAMS**

#### **Summary of Comments and Response to Comments on the Proposed Regulation**

#### **310 CMR 60.05:**

#### **Global Warming Solutions Act Requirements for the Transportation Sector and the Massachusetts Department of Transportation**

**Regulatory Authority: M.G.L. c. 21N and c. 111, §§ 142A-M**

**January 2015**

This information is available in alternate format. Call Michelle Waters-Ekanem, Diversity Director, at 617-292-5751. TDD# 1-866-539-7622 or 1-617-574-6868  
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## **SUMMARY OF AND RESPONSE TO COMMENTS ON 310 CMR 60.05: Global Warming Solutions Act Requirements for the Transportation Sector and the Massachusetts Department of Transportation**

On October 16, 2014, The Massachusetts Department of Environmental Protection (MassDEP) proposed amendments to 310 CMR 60.00 by adding a new section, 310 CMR 60.05 - Global Warming Solutions Act (GWSA) Requirements for the Transportation Sector and the Massachusetts Department of Transportation (MassDOT). The amendments:

- Establish a requirement that the metropolitan planning organizations (MPOs) in Massachusetts evaluate and track the greenhouse gas (GHG) emissions and impacts of regional transportation plans (RTPs), transportation improvement programs (TIPs), and state wide TIPs (STIPs) and projects included in TIPs;
- Establish a requirement that the MPOs, in consultation with MassDOT, develop and utilize procedures to prioritize and select projects in RTPs, TIPs, STIPs based on factors that include GHG emissions and impacts;
- Establish a requirement that MassDOT demonstrate that its commitments included in the Clean Energy and Climate Plan (CECP) for 2020 are implemented or, if necessary, supplemental measures, including achieving a target level of GHG emissions from the transportation sector and/or MassDOT's activities, are identified and implemented.

MassDEP conducted public hearings and held a public comment period on the proposed amendments in accordance with the public review process requirements of M.G.L. Chapter 30A, made the proposed amendments available for a 21-day public review, published notification of the amendments, and held public hearings on November 6, 2014 to solicit public comment on the proposed regulation. The public comment period ended on November 17, 2014. Relevant comments are summarized and responded to below. A list of all parties who submitted oral and/or written testimony on the proposed amendments is included in Attachment 1.

**Massachusetts Secretary of State Changes to the Proposed Amendments:** In its review of the proposed amendments that went out for public comment, the Massachusetts Secretary of State made several non-substantive, formatting changes to the regulation to reflect the Secretary of State's formatting conventions. These changes are included in the final amendments.

**Comment:** The worsening climate crisis and GWSA emission targets demand decisive action to mitigate the future effects of climate change. In drafting the proposed rules we should seize the opportunity to plan for a new era in transportation, one that encourages use of public transportation, bicycling, walking, and promotes purchase of more fuel efficient vehicles.

The transportation sector in Massachusetts produces approximately 40% of statewide total GHG. In order to begin reducing these emissions, Massachusetts must first address personal vehicle use. As Massachusetts has set a goal of having 300,000 zero emission vehicles (ZEVs) on the road by 2025, it should be a goal of MassDOT to advance the use of ZEVs by investing in infrastructure including: charging stations, interstate passages, and preferential parking.

Investment in mass transit is critical in reducing GHG emissions. The proposed rules and transportation project improvements should take into consideration the entire state. Such improvements should address regional transportation and rail infrastructure including such projects as the North-South Rail Link, South Coast Rail, and commuter rail extension to Springfield.

We are at an important crossroads in our economic recovery and we have a choice to either direct our focus and investment on initiatives that will boost our progress, our health and our environment or simply carry on with the status quo. (State Representative Frank I. Smizik)

**Response:** MassDEP agrees with these comments and believes this regulation will support the Commonwealth's goals of achieving reductions in GHG emissions from the transportation sector, promoting alternative modes of transportation and infrastructure investments, and increasing the deployment of ZEVs in Massachusetts. MassDEP notes that MassDOT is a participant in the Massachusetts Electric Vehicle Initiative Task Force and is providing funding for electric vehicle charging stations in Massachusetts as well as increasing the number of plug-in vehicles in its fleet.

**Comment:** The Massachusetts transportation sector has lagged behind other states' efforts to address climate change. The result of ballot Question 1 (repealing the inflation indexed gas tax) is unfortunate and would hamper efforts such as hybrid vehicle acquisition; this must be remedied. (Representative Denise Provost)

**Response:** As stated in the response to the previous comment, MassDEP believes this regulation will support the Commonwealth's goals to achieve reductions in GHG emissions from the transportation sector.

**Comment:** Transportation is a significant contributor to GHG emissions and, as shown on the GWSA scorecard, progress is needed in the transportation sector. Environmental League of Massachusetts supports the involvement of Regional Planning Agencies and consideration of land use assumptions in the models as well as provision for supplemental measures, a "plan B", if needed. (Environmental League of Massachusetts)

**Response:** See response to the previous two comments.

**Comment:** Will MassDEP hold working group meetings to address the implementation of the regulation and, if so, when? Is MassDEP working on other regulations to address GWSA goals? (Northeast Utilities)

**Response:** As required by the regulation, MassDEP will participate in the Interagency Consultation process to be convened by MassDOT. This process will require a consultation meeting with relevant parties on specific implementation issues (e.g., technical analysis requirements) and will occur prior to the GHG assessments performed by the MPOs. The regulation also includes a requirement for public review and comment on MPO GHG assessments and GWSA-related activities.

MassDEP is considering and developing new policies and regulations to meet the 2020 and 2050 GHG reduction goals and interim goals as required by GWSA. For more detailed information on what regulations MassDEP intends to pursue to address GWSA goals, see the "Global Warming Solutions Act 5-Year Progress Report" at: <http://www.mass.gov/eea/docs/eea/gwsa/ma-gwsa-5yr-progress-report-1-6-14.pdf>.

This report contains information on regulatory and non-regulatory efforts MassDEP has undertaken, and discusses supplemental strategies the Commonwealth is contemplating to assist in meeting the goals of GWSA.

**Comment:** MAPC supports the proposed regulation and hopes that the regulations will be adopted by the end of the year. MAPC appreciates the inclusion of several recommendations by the GWSA Implementation Advisory Committee working group, including: required modeling consistent with land

use policies, the definition of “Appropriate Planning Assumptions” and the coordination with regional planning agencies (RPAs). However, MAPC urges forecasting modeling be required to include the additional planning assumption categories of “demographic projections, economic projections, fuel efficiency, fuel prices, transit costs, [and] transit system capacity” to “result in more accurate forecasts for future year conditions” and “show the real impact on expected travel patterns.” (MAPC)

**Response:** MassDEP believes these issues are best addressed through the Interagency Consultation process required under 310 CMR 60.05(4)(b)1.h. and is not revising the definition of “Appropriate Planning Assumptions” in the final regulation.

**Comment:** MAPC proposed language to “require that these plans either reduce GHG emissions or have a net neutral effect on GHG emissions compared to alternative investment scenarios.” This change is suggested to determine how the GHG emissions of various investment alternatives would differ and to reach long-term GWSA GHG reductions. MAPC stated such a requirement might not be applied to every MPO and TIP, but that the TIPs from all the MPOs taken together as a whole should show reductions in GHG emissions. (MAPC)

**Response:** As stated in the “Background Document and Technical Support for Public Hearings” for the draft regulation and as required by MassDOT’s GreenDOT Policy Directive, one of the purposes of the regulation is to require that MassDOT and the MPOs adopt and implement procedures to evaluate and track the GHG emissions and impacts of RTPs, TIPs, and STIPs and projects included in TIPs and establish a requirement that the MPOs, in consultation with MassDOT, develop and utilize procedures to prioritize and select projects in RTPs, TIPs, and STIPs based on factors that include GHG emissions and impacts. The other purpose of the regulation is to require that MassDOT demonstrate that its commitments included in the Clean Energy and Climate Plan (CECP) for 2020 are implemented or, if necessary, supplemental measures are identified and implemented, to ensure the 2020 GHG emission targets from the transportation sector and/or MassDOT’s activities are achieved. The final regulation does not include MAPC’s proposed language to require “plans” to demonstrate a reduction or a net neutral effect on GHG emissions. However, the regulation does not preclude MPOs from taking this approach.

**Comment:** At the October MPO meeting, one member questioned the real benefit of tracking GHG on reducing emissions. The focus should be on developing regulations that directly result in a reduction of carbon dioxide (CO<sub>2</sub>) emissions instead of creating a bureaucratic accounting exercise. One example would be to enact regulations which would require MassDOT to actively maintain the timing of traffic signals as this would provide a tangible benefit of GHG emission reductions. (BRPC)

**Response:** See the response to the previous comment. MassDEP believes the regulation will serve the actions requested in the comment.

**Comment:** The state should provide resources and finances to allow the MPO’s staff to track emissions and impacts in a consistent manner all across the state. (Berkshire Environmental Action Team (BEAT))

**Response:** MassDEP encourages MPOs to work with MassDOT to include the activities required by the regulation in their respective unified planning work programs (UPWPs). Including the activities in the UPWPs is the appropriate mechanism for the MPOs and MassDOT to identify and allocate resources.

**Comment:** The regulation is silent about state funding for the MPOs to perform the required work under the regulation nor is there mention of covering the cost for training and software. MPOs should not be required to use federal transportation planning funds for this activity; it would shift funding from other tasks/activities. (BRPC)

**Response:** See the response to the previous comment.

**Comment:** The Pioneer Valley Planning Commission (PVPC) stated that it is the designated MPO for the region's 43 communities and that PVPC is already including some of the provisions of the proposed regulation including sustainability provisions in the TIPs. PVPC requests state resources to implement certain requirements including the GHG tracking inventory, which shows that transportation is the region's largest GHG contributing sector at 38% of total GHG emissions. (PVPC)

**Response:** MassDEP appreciates PVPC efforts to address GHG emissions. In response to the request for state resources, see the response to the previous two comments.

**Comment:** Tracking and evaluation (assessment) of GHG emissions is best left with MassDOT. (BRPC)

**Response:** MassDEP disagrees with this comment. MPOs are the key entities that make decisions on RTPs, TIPs, and projects included in these plans and perform technical work to inform these decisions. This technical work has historically included assessment of the air quality impacts of MPO actions. Requiring the assessment of GHG emission impacts by MPOs is not only consistent with the mission of MPOs, but necessary for the Commonwealth to ultimately achieve its climate protection goals under GWSA.

**Comment:** 310 CMR 60.05(3)(a) (Applicability, General) should cover all the GHGs listed in 310 CMR 60.05(2) Definitions: Greenhouse Gases. We are especially concerned that the regulations include methane (CH<sub>4</sub>), a potent GHG with a global warming potential 86 times that of CO<sub>2</sub> over a 20-year time-frame according to the Intergovernmental Panel on Climate Change 2013 report. (BEAT)

**Response:** The "Massachusetts Annual Greenhouse Gas Emissions Inventory: 1990-2011, with partial 2012 data - July 2014" at: <http://www.mass.gov/eea/docs/dep/air/climate/maghginv.xls> estimates that less than one percent of Massachusetts' methane emissions are produced from mobile sources. Therefore, the proposed regulation did not cover methane and the regulation will not be changed.

**Comment:** It is important that MassDOT and the MPOs make use of the best available technical tools to evaluate anticipated GHG impacts of our transportation system investments, and that we use these projections as a criterion in prioritizing our investments. It is also appropriate that MassDOT report on the actions that it takes in other areas to reduce emissions. (MassDOT)

**Response:** MassDEP agrees with this comment and highlights that technical analysis tools to evaluate emission and transportation impacts of RTPs, TIPs, and projects included in these plans evolve and improve over time. As such, subsection (4), Interagency Consultation, of the regulation requires the determination of the "appropriate emissions analysis models and/or other analysis techniques, including consulting on model development and assessing project design factors for modeling." MassDEP also agrees that MassDOT should report on activities that it takes in other areas that reduce emissions and encourages MassDOT to do so pursuant to the requirements in subsection (3)(b)2.

**Comment:** MassDOT has committed to taking actions in the CECP for 2020 and the commitments will be revised to reflect current conditions in the CECP update that will be completed by the end of calendar year 2015. MassDOT expects that the CECP update will reflect its experience in calculating GHG impacts and the scale of the projections. MassDOT also expects that the CECP commitments that it will report on under the regulation, and any "supplemental measures" that may be required, will be measures that are under MassDOT's control, and not dependent upon actions of other parties. (MassDOT)

**Response:** MassDEP agrees with this comment and notes that any updates to the GHG calculation methodology will be addressed through Interagency Consultation provisions of the regulation as indicated in the response to the previous comment.

**Comment:** MassDOT is prepared to implement and report on the requirements of the draft regulation, but has concerns mainly relating to the difficulty of making quantitative projections about future GHG emissions that it would like considered in finalizing and implementing the regulation. These issues include the accuracy and precision of GHG projections, the scale of the reductions from the regulated items, the complexity of the factors that determine GHG emissions from the transportation sector, and MassDOT's relative influence on those factors. (MassDOT)

**Response:** See response to the previous comment.

**Comment:** The GHG projections cited in the "Background Document and Technical Support for Public Hearings" and the projections included in the TIPs and STIPs for the past several years made use of the best tools available at the time for predicting GHG impacts of green activities. However, these tools are limited in their precision and now are most useful for comparative analysis and order-of-magnitude projections. MassDOT will continue to work with the MPOs to develop the capacity for GHG analysis. (MassDOT)

**Response:** See response to the previous two comments.

**Comment:** The requirement for MPOs to evaluate and track GHG emissions is vague. There is no specificity as to the level of detail that is required nor is there a specific statement that modeling is required. Directly related to this is the availability of data. According to MassDEP GHG guidance documents, the means to quantify CO<sub>2</sub> emissions from motor vehicles is to be based on the amount of fuel used. MassDOT does not collect data on fuel sales by the location which it is dispensed at, so a reliable source for this information does not exist that can be used to determine fuel quantities by MPO region. The use of VMT estimates would only result in a "guestimate" of CO<sub>2</sub> emissions as actual VMT data is not available from MassDOT and numerous assumptions would need to be made on fleet wide characteristics including fuel mileage (MPG) and vehicle composition.

The regulations propose establishing a requirement that in consultation with MassDOT, MPOs develop and use procedures to prioritize and select projects in certification documents based on GHG emissions and impacts. Concerns exist related to the specificity associated with this requirement. For example, what is the minimum number of GHG evaluation factors that is acceptable to comply with this regulation? It is unknown how much weight this particular evaluation criteria is required to be given. (BRPC)

**Response:** As indicated in the response to the four previous comments by MassDOT, subsection (4) of the regulation, Interagency Consultation, will serve as the forum to address the questions and concerns raised by this comment. Interagency consultation is required prior to MassDOT and the MPOs performing a GHG assessment of RTPs, TIPs, and STIPs.

**Comment:** The project-level GHG impacts included in TIPs, STIPs, and RTPs are quite low compared to the overall GHG emissions of the transportation sector (e.g., the federal fiscal year 2012 RTPs across Massachusetts resulted in a 0.10% reduction in GHG emissions as compared to the base case emissions). However, this does not mean that GHG emissions in the transportation sector cannot be reduced nor does it mean that MassDOT's actions should not support such a reduction. The transportation system and the way it generates GHG emissions are complex and MassDOT's ability to influence travel behavior is indirect, principally through project investment choices, design standards, traveler education programs, and system operations efficiency. The transportation sector GHG emissions are based largely on the

modes of travel that travelers choose, the amount they travel, particularly driving, and vehicle efficiency. (MassDOT)

**Response:** MassDEP agrees with this comment. However, to reach our long-term climate goals, additional GHG emission reductions will be needed from the transportation sector including reductions from the measures that MassDOT cites in its comments.

**Comment:** 310 CMR 60.05(4)(a)1.d. requires MassDOT to demonstrate it “is making best efforts on CECP for 2020 commitments, that it is pursuing supplemental GHG reduction measures where it is unable to meet CECP for 2020 commitments, and that these reductions are on track to achieve the GHG emissions targets for 2020 and 2050.” The provision requiring MassDOT to certify that GHG reductions are “on track to achieve” 2020 and 2050 GHG reduction targets may be difficult to realize. MassDOT can certify what actions it has taken relative to CECP commitments, and the projected effects of those actions based on best analytical approaches. Given the complexity of the transportation sector, MassDOT’s influence over the overall transportation sector GHG emissions, and the scale and precision of GHG reduction projections, however, it would be extremely difficult for MassDOT to certify that those actions have a specific and knowable effect on GHG emissions years and decades into the future. MassDOT also indicates that there are currently no transportation sector-specific GHG reduction goals for 2050 in the CECP. (MassDOT)

**Response:** MassDEP acknowledges that the CECP for 2020 does not include transportation sector-specific GHG reduction goals for 2050 and has removed the 2050 requirements in the final regulation. However, MassDEP notes that additional reductions will be needed from the transportation sector to meet the GWSA 2050 goal to reduce emissions by 80% below 1990 levels. As Clean Energy and Climate Plans for 2030, 2040 and 2050 are released over coming years, transportation sector goals will be established, against which MassDOT progress can be assessed and this regulation can be updated as needed.

**Comment:** The regulation requires MPOs to track GHG emissions and impacts from RTPs, TIPs, STIPs, and projects included in TIPs. MPOs are not responsible for the STIP; this is the sole responsibility of MassDOT. The regulation does not apply or result in capturing/tracking the emissions from projects that are solely funded with state funds as the STIP only reflects projects that are funded with federal funds. (BRPC)

**Response:** MassDEP agrees with these comments and has removed the requirement for MPOs to track GHG emissions and impacts from STIPs in the final regulation. In addition, subsection (1) of the regulation has been amended to include a statement that makes it clear that MassDOT is required “to evaluate and track the GHG emissions and impacts of State Transportation Improvement Programs (STIPs) and state-funded projects that are not included in STIPs.”

**Comment:** The regulations would empower MassDOT to implement “supplemental measures,” if necessary, to achieve GHG emission targets. It does not appear that these “supplemental measures” have been identified. There is no requirement for MassDOT to consider the impacts these measures would have on MPO regions, nor is there a requirement for “consultation” with the MPOs prior to their implementation. (BRPC)

**Response:** The regulation requires MassDOT to implement supplemental measures in the event there is a shortfall in achieving the GHG reduction targets in the CECP for 2020. To address this comment, the final regulations include a requirement in 310 CMR 60.05(4)(b)1.i., which requires MassDOT to identify and discuss supplemental measures that it will implement pursuant to subsection (3)(b)5. This will provide an opportunity for MPOs to provide input on MassDOT’s proposed supplemental measures.

**Comment:** The effective date of the regulation is October 1, 2014, which has passed. If enacted with this date, it would violate due process. (BRPC)

**Response:** The draft regulation was proposed for public hearing and comment on October 16, 2014 and will be effective when it is published as a final regulation in the Massachusetts Register. However, the final regulation has been revised from the proposed regulation, as follows, to indicate which RTPs, TIPs, and STIPs the requirements are applicable to:

“MassDOT and the MPOs shall apply the requirements of 310 CMR 60.05 related to the GreenDOT goals and the GHG assessments to RTPs, TIPs, and STIPs effective October 1, 2015, with the start of federal fiscal year 2016.”

**Comment:** The adoption process should be extended and MassDEP should utilize the consultation procedures in the regulation to meet with all affected parties to discuss, gain consensus and finalize the regulation in a form that achieves the desired outcome with regulations that are realistic and acceptable to all stakeholders. This will insure that the desired outcome is achieved as a result of creating ownership by involving parties in this effort. (BRPC)

**Response:** MassDEP believes that the public comment period for the draft regulation has given affected parties the opportunity to provide input on the draft regulation. In addition, the Interagency Consultation process will give relevant parties the opportunity to provide input into the GHG assessment process.



## Attachment 1

<u>Name</u>	<u>Affiliation</u>
1. Jane Winn	Berkshire Environmental Action Team
2. Clete Kus	Berkshire Regional Planning Commission
3. Nancy Goodman	Environmental League of Massachusetts
4. Ned Codd & Frank DePaola	Massachusetts Department of Transportation
5. Representative Denise Provost	Massachusetts House of Representatives
6. Representative Frank I. Smizik	Massachusetts House of Representatives
7. Nicholas Downing	Metropolitan Area Planning Council
8. Tom O'Rourke	Northeast Utilities
9. David Elvin	Pioneer Valley Planning Commission